

ABSTRACT OF THE DISCLOSURE

A non-volatile semiconductor memory device includes: an array of electrically rewritable nonvolatile data storage memory cells each having a transistor structure with a control gate; reference current source circuit configured to generate a first reference current adaptable for use during an ordinary read operation and a second reference current for use during a verify-read operation for data status verification in one of writing and erasing events; a sense amplifier configured to compare read currents of a selected memory cell as selected during the ordinary read operation and the verify-read operation with the first and second reference currents respectively to thereby perform data detection; and a driver configured to give an identical voltage to the control gate of the selected memory cell presently selected during the ordinary read operation and the verify-read operation.